



# Test & Inspect Your Emergency Generator

by Paul Harris, Standby Power Solutions, Inc.

**For times like the JJ's Bistro Explosion in Kansas City, your emergency generator is a lifeline**



Photo credit: Pitch.com

In the event of an emergency such as the recent explosion in JJ's restaurant in Kansas City on February 19<sup>th</sup>, utilities to the area are necessarily interrupted either by the catastrophe itself or utility crews who need to shut off the flow of gas and electricity in order to make the area safer for first responders to do their work.

When this happens, emergency generators are designed to be the primary source of power for smoke control systems, fire suppression systems, emergency communication systems, egress lighting, exit lighting, emergency egress elevators and platforms, and other life safety devices.

These devices are not intended as items of

convenience in the event of a power outage. Rather, they are essential life safety systems upon which all other life safety systems depend.

At a minimum, the owner of an emergency generator is required by Kansas Fire Prevention Code to inspect the system weekly and test it under load monthly. All generator owners should acquire a copy of NFPA 110, 2005 edition and look at chapter 8, *Routine Maintenance and Operational Testing*.

The weekly inspection is pretty simple. An owner just needs to check the batteries and look the system over for any obvious problems. I would check to make sure the engine heater is working as well as check oil, fuel,

and coolant levels. It would also be a good idea to look for evidence of rodent infestation, theft, vandalism, leaks, and

weather damage and take appropriate corrective action.

The monthly tests are a bit more involved. All transfer switches need to be operated and the generator needs to be run under at least 30% of its rated load for 30 minutes. This is to make sure the system is going to work when needed. If you can't get it to 30% of the rated load, then diesel generators need to be exercised annually with a supplemental load for 2 hours as outlined in NFPA 110, chapter 8.4.2.3.

Emergency generators have long been viewed as conveniences for times when the power goes out, and rightly so. It's great to be warm and safe when the power lines are down and

the snow is blowing. But our generators are far more than that. They are life safety devices upon which nearly all other safety equipment depends.

A permanent record must be kept of both the weekly inspections and monthly tests. Your fire marshal can provide you with a sample inspection/testing log. Your fire marshal may ask to see your records at your next inspection.

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## Ceiling Tile Fire Ratings

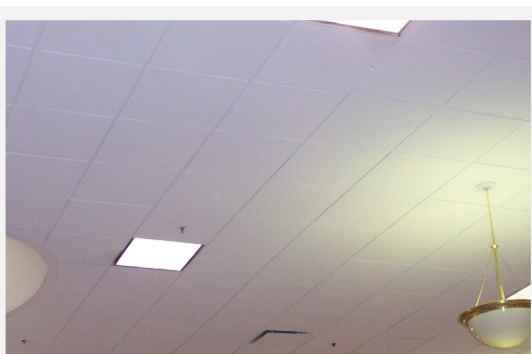
These days, there are a lot of entrepreneurs looking to start their own retail stores, shops and restaurants. In an effort to save money, many renovate and design the interior of these stores themselves. This can be a great way to really make a place look just the way you want without going into massive debt. However, when it

comes to ceilings, many of these do-it-yourselfers overlook the very important fire ratings, which can come back to haunt you in a major way.

I think this problem originates when people assume that a ceiling tile is a ceiling tile, and one can simply be replaced with another when the time comes. Attention is normally paid only to attributes like noise reduction, light reflectance, aesthetic appeal and cost. While these are all important characteristics,

poor performance in any of them won't force you to completely replace your ceiling tiles. But choosing a tile without the correct fire ratings will!

should not be used as an interior finish or building component. Most, if not all, counties in the US require a Class A rating for any interior finish or building component.



The second fire rating is called the Fire Barrier Rating. This rating utilizes American Society for Testing and

Materials (ASTM) Test E -119, and identifies the length of time an entire ceiling assembly will resist and prevent the spread of a fire. While a ceiling tile alone cannot truly be rated with its own Fire Barrier Rating, it is usually classified with the rating that it CAN achieve when used in a ceiling assembly that collectively has that same rating. For example, if a ceiling tile is given a Fire Barrier Rating of 2 hours, it is meant for use in a full ceiling assembly that also has a 2 hour Fire Barrier Rating.

### Fire Ratings

There are two main fire ratings involved with ceiling tiles. The first is based on Underwriters Laboratories (UL) Test No. 723, and is called the Surface Burning Characteristics Rating, or Flame Spread Rating. This rating determines how a building material is going to react in a fire. A good rating (Class A or Class 1) in this test means the material is almost entirely non-flammable (doesn't burn easily). A bad rating means the material is highly flammable, and



## REPLACING CEILING TILES?

### WHAT IS REQUIRED?

Most commercial installations require a fire barrier ceiling of some kind. Sometimes, this is the true ceiling, which is found BEHIND the drop ceiling. Other times, the drop ceiling is considered part of this fire barrier ceiling, and MUST have fire barrier rated ceiling tiles.

Ceiling tiles that are rated Class A for flame spread but do NOT have a fire barrier rating are treated as an interior finish like a paint. They do absolutely nothing to prevent the spread of a fire, nor do they cause the fire to spread any faster. If your building already fully meets fire codes, you can almost always add a Class A ceiling tile for looks, so long as it does not interfere with the operations of any other assembly or fire sprinkler system.

Fire sprinklers must be installed within 1.5' of a fire barrier. This is so that the heat of a fire can collect in close proximity to the sprinkler heads, ensuring that they activate early enough to successfully control a fire. If you have sprinkler heads that are dropped through a drop ceiling, the ceiling tiles almost always need to have some kind of fire barrier rating.

Ceiling tiles like Ceilume's Feather-Light Series are designed to drop away from the ceiling grid in the event of a fire, to allow hidden sprinkler heads ABOVE the grid to activate and put the fire out. This allows you to hide unsightly sprinkler heads until they are necessary. These tiles should have a Class A fire rating and NO fire barrier rating. The sprinklers above the drop ceiling must still meet the same codes that any other sprinklered situation requires.



### SAFETY TIP

Install smoke alarms in every bedroom, outside each separate

sleeping area and on every level of the home, including the basement. Interconnect all smoke alarms throughout the home so when one sounds, they all sound!



### From the Chief: Licensing Requirements and More

by Brenda McNorton, Chief of Prevention Division

We are quickly approaching the 2013 licensing season, and with this new season we have made some changes that will affect this year's licensing requirements and what you as the licensee will need to provide our office to make the licensing season go as smoothly as possible.

One of the largest requests from our office this licensing season will be that you ensure we have your properly documented training dates and that you are current with the refresher training requirements. As we begin preparing for the 2013 season, we are noticing problems with companies not having current refresher training or companies not having the training for all license classes they hold, as required by KSA 55-1812. This year the OSFM will not process any licenses until we have received all of the proper documentation on your training requirements. When you are filling out your application this year please make sure you are up-to-date with your certifications

and you have provided our office with a copy of the most current certification.

Reminder, with the exception of Class 8 (Installation and Service) license, the statute only requires one person from the company to be certified for each of their facilities licenses, so please do not send duplicate certifications, as it only adds to the confusion.

Another situation that has come to our attention is that license holders of Class 4 (Cylinder Filling) and Class 5 (RV or Mobile Fuel Containers) are using their propane supplier's Class 1 dealer's license to meet the dealer licensing requirements. Our legal counsel from the Attorney General's office has advised that current Statutes and Regulations are very clear in that both of these classes must carry a Class 1 license if they sell propane, regardless of who owns the dispensing and storage equipment. In addition, the Class 1 training certification is also required, and this documentation must be submitted to



*Brenda McNorton, OSFM Chief of Prevention Division*

our office before a Class 4 or Class 5 license can be issued.

We are working with PMAK and the Attorney General's Office to change the education and training portion of the regulation for Class 4 and Class 5 licenses. However, at this time we have been advised that we must enforce current law. We realize this change will cause additional education to be taken by facilities; however, at this time our agency is unable to modify these requirements.

A final positive change! We can now accept VISA and MasterCard credit/debit cards with no additional transaction fees to our customers. The OSFM has also updated the

online propane renewal forms to allow customers to fill them out online, print, sign, and email the forms to the OSFM. The Affidavit of Compliance form no longer needs to be notarized by a Notary Public. This change allows all

renewal forms to be conveniently sent to us via email. The OSFM highly encourages customers to submit their application via email to help expedite the renewal process.

#### Prevention Division News: Chris Dibbern Leaves OSFM To Become STFD Battalion Chief

The OSFM family lost one of our members this month. Our Education Consultant/NFIRS Program Manager, Chris Dibbern, has accepted a position as a Battalion Chief with the Soldier Township Fire Department, where he has served for 16 years.



Chris started with OSFM in May of 2011 as a Research Analyst responsible for the NFIRS reporting and Burn and Insurance Loss databases. In January of last year, he was reassigned to the Prevention Division as an Education Consultant.





## Test Your Fire Inspection Skills

OSFM staff have identified several non-compliant issues within these pictures. See if you can identify them all.



### Answer Key

1. Combustible storage of paper not properly separated
2. Exiting into a construction site
3. Canoe suspended from the ceiling is made with highly flammable materials — such as several coats of polyurethane (this facility is non-sprinklered and they should have treated this canoe with flame retardant material).



# How Facility Expansions Affect Fire Alarm Systems

This article was originally published by FacilitiesNet

Expanding a commercial facility is an extremely complex undertaking. Trying to maintain legacy fire alarm systems throughout this process can be challenging, often as a result of unforeseen issues. Issues that can force fire alarm system upgrades can include product obsolescence, manufacturer discontinuation of product, and incompatibility with newer product lines.

Unfortunately, being able to predict these problems requires knowledge of manufacturer model lines and products. Ultimately, the time to find out that the fire alarm systems you are maintaining require upgrade is prior to developing the budgets of future expansions rather than in the middle of a project when the added cost is difficult to manage.

Master planning or a general asset evaluation of life safety equipment can ultimately head off surprises. Advance planning can make continued maintenance and expansion

of life safety systems significantly less expensive and can typi-

cal jurisdictions require that, once the fire alarm control unit

is only adopted include the International Building

code guidance about renovations. This guidance is broken into additions, alterations, and repairs. Complete remodels and space renovations typically consist of removing the entire interior, or some major piece of the interior, of a building or space and often result in reallocation of space or a change of use; these projects commonly trigger code compliance upgrades. Depending on the size of the project, the most common impact on fire alarm systems consists of the replacement of notification appliances and replacing or upgrading the existing detection. If a space has to be brought up to current code, it may require significant upgrades in notification and detection. Current standards designed to make facilities safer for hearing- and visually-impaired occupants can necessitate the installation of strobes and horns or speakers at much more frequent intervals than previous codes.



cally spread costs over a period of years.

### Code Compliance

What type of facility expansions can trigger complex fire alarm system upgrades? The answer varies greatly by jurisdiction, system brand, and technology vintage. Jurisdictional prescriptive codes can be based on model building codes that have been significantly modified; be completely custom codes; or be a direct adoption of a model building code. For example, some

(FACU) is modified, the entire fire alarm system must be brought into compliance with current code. Other jurisdictions mandate upgrades based on the percentage of the system that will be impacted by the renovation.

For jurisdictions that directly adopt or modify the model building codes, those model codes offer guidance regarding what facility modifications will require the fire alarm system to be brought up to current code. Model building codes com-

Codes developed by the International Code Council (ICC), as well as the Building Construction and Safety Code (NFPA 5000) and the Life Safety Code (NFPA 101), both developed by the National Fire Protection Association.

In jurisdictions that reference the International Building Codes, chapter 34 of the International Building Code (IBC, 2012 edition) and the International Existing Building Code (IEBC, 2012 edition) offer detailed prescriptive



## PROPANE FACILITIES STATS

### *From 2012 Licensing Figures:*

Class 1 Dealer

License Fee \$175.00

Required for retail distribution of LPG

301 Issued

Class 2 Bulk Storage

License Fee \$25.00 per bulk storage tank

674 Issued

Class 3 Cylinder Transport

License Fee \$100.00 per truck

193 Issued

Class 4 Cylinder Filling

License Fee \$50.00 per location

328 Issued

Class 5 R.V. and/or Mobile Fuel Filling

License Fee \$50.00 per location

289 Issued

Class 6 Cylinder Exchange Cabinet

License Fee \$10.00 per exchange cabinet

2,296 Issued

Class 8 Installation and Service – LPG

License Fee \$20.00 per installer/tech

370 Issued

### *Top 10 Cited Violations of 2012*

E01 – Licensing Requirement

Co3 – Cabinet Protection

Co4 – Cabinet Signage

Co1 – Cabinet Location

O04 – Fire Extinguisher Annual Service

A16 – Emergency Shutoff Valve

Do2 –Signage

A04 – Container Marking

A11- Combustible Storage, Weeds, Grass & Trash

A22-Gauges

## Tips for Safe Grilling

By Greg Noll, Propane Marketers Association of Kansas

Propane has become a very popular fuel of choice for outdoor grilling. The grilling season is just a few weeks away but now is the time to review some basic grilling safety tips so entire family can enjoy a fun and safe outdoor meal!

Always read and follow the grill manufacturer's instructions before turning on and lighting the grill. Keep the grill top open when lighting a propane grill, and don't close it until you are sure the grill is lit. If the igniter doesn't work properly, replace it in accordance with the grill manufacturer's instructions. When grilling is completed, turn off the burner control and close the cylinder valve. When a grill is not in use for extended periods of time, cover disconnected hose-end fittings with protective caps to keep them clean. Properly transport and

store gas cylinders. When refilling or replacing a propane cylinder, transport in a secure, upright (vertical) position in a well-ventilated area in your vehicle, and

nician inspect your grill and cylinder. Consult a qualified service technician if you are having grill or propane cylinder problems. Don't smoke while handling a propane cylinder. Never use matches or lighters to check for propane leaks. Don't allow children to tamper with the cylinder or grill.



Photo credit: FoodRepublic.com

take it home immediately. Always use or store cylinders in a secure and upright position outdoors (not in a garage or shed).

If you smell gas, and it is safe to do so, turn off the cylinder valve, turning it to the right (clockwise). If you are unable to turn off the valve, immediately leave the area and dial 911 or call your local fire department. Before you use the grill again, have a qualified service tech-

Grilling outdoor meals has become an American tradition. For busy families who want to reconnect over meals, grilling allows an opportunity to change the menu — and the venue. Dinner on the deck provides more than just a location or reason to eat together. The great outdoors can supply the perfect setting to teach children and other family members about meal preparation and grilling safety to ensure a delicious and safe grilling season.

### Changes for 2013 Licensing of Propane facilities

#### *Training Documentation*

Make sure you have copies of your properly documented training dates and that you are current with your training. Training is required by KSA 55-1812. This year OSFM will not process any licenses until we have received all of the proper documentation on your training re-

quirements. Reminder, the statute requires that only one person from the company to be certified, so please do not send multiple certifications, as it only adds to the confusion.

#### *Changes for 2013 Licensing Class 4 & Class 5:*

Previous years we have not been requiring Class 4 and Class 5 to carry a

Class 1 license. After consulting the Assistant Attorney General who represents our agency, we have been advised that the current Statutes and Regulations are very clear in that both Class 4 and Class 5 must carry a Class I license, which also includes training certification requirements